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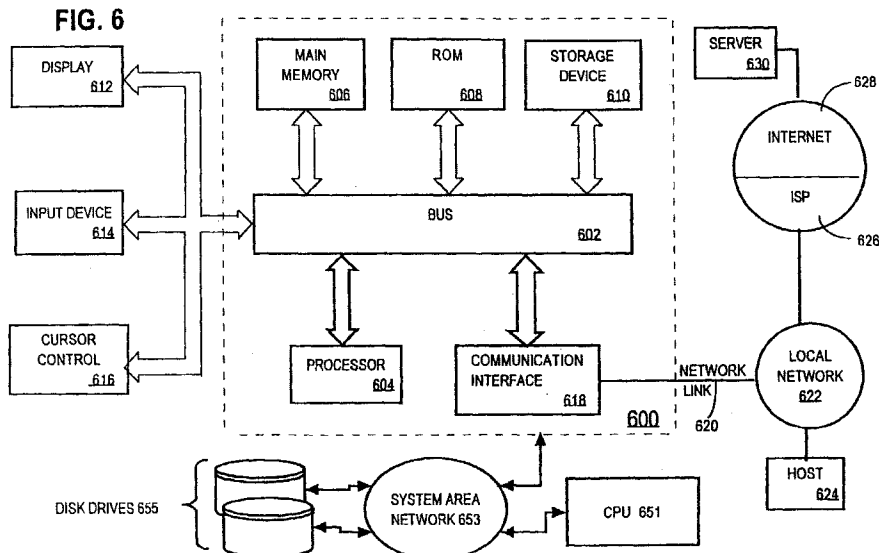
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(54) **Managing recovery of data after failure of one or more caches**

(57) A method and apparatus are provided for transferring a resource from the cache of one database server to the cache of another database server without first writing the resource to disk. When a database server (Requestor) desires to modify a resource, the Requestor asks for the current version of the resource. The database server that has the current version (Holder) directly ships the current version to the Requestor. Upon shipping the version, the Holder loses permission to

modify the resource, but continues to retain the resource in memory. When the retained version of the resource, or a later version thereof, is written to disk, the Holder can discard the retained version of the resource. Otherwise, the Holder does not discard the retained version. Using this technique, single-server failures are recovered without having to merge the recovery logs of the various database servers that had access to the resource.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 11 9227

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 5 327 556 A (MOHAN CHANDRASEKARAN ET AL) 5 July 1994 (1994-07-05) * abstract * * column 16, line 50 - column 18, line 7 * * column 21, line 40 - line 55 * * column 28, line 10 - column 32, line 30 * * -----	1,2, 6-12, 16-22, 26-30	G06F11/14 G06F11/20
A	KERMARREC A-M ET AL: "A RECOVERABLE DISTRIBUTED SHARED MEMORY INTEGRATING COHERENCE AND RECOVERABILITY" 25TH. INTERNATIONAL SYMPOSIUM ON FAULT TOLERANT COMPUTING. DIGEST OF PAPERS. PASADENA, JUNE 27 - 30, 1995, INTERNATIONAL SYMPOSIUM ON FAULT TOLERANT COMPUTING, LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. SYMP. 25, 27 June 1995 (1995-06-27), pages 289-298, XP000597800 ISBN: 0-7803-2965-1 * the whole document * -----	1-30	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G06F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 2 August 2002	Examiner Leuridan, K
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPC FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 11 9227

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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02-08-2002

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82